

REMARKS

In view of the following remarks, further examination and reconsideration of the rejections in the Office Action of November 24, 2008 are respectfully requested.

In items 2 and 3 of the Office Action, claims 34, 38, 41, and 54-56 are rejected under 35 USC § 103(a) as being unpatentable over Wang et al. (WO 00/03426) in view of Boyd et al. (US 7,264,007); in item 4 of the Office Action, claim 40 is rejected under 35 USC § 103(a) as being unpatentable over Wang in view of Boyd, and further in view of Talieh (WO 00/26443). These rejections are traversed for the following reasons, and withdrawal of the rejections is respectfully requested.

Claim 34 recites a substrate processing apparatus comprising a processing head having anodes *and* cathodes, arranged alternately along at least one direction, so as to face the substrate when held by said substrate holder. This is not disclosed by Wang, Boyd, or Talieh.

Wang discloses electrodes 1, 2, and 3 (for example, see page 13, lines 25-27). Under a deplating process, electrodes 1, 2, and 3 function as *anodes* (see page 14, lines 7-15). Conversely, under a plating process, electrodes 1, 2, and 3 function as *cathodes*. These two states are achieved by reversing a polarity of the power supply (see page 15, lines 9-13). Thus, in Wang *all* the electrodes are cathodes, or *all* the electrodes are anodes; there is no disclosure of a processing head having anodes *and* cathodes. There is also no disclosure that the anodes and cathodes on the processing head are arranged alternately along at least one direction, so as to face the substrate when held by the substrate holder. Further, it can also be seen, for example in figure 7B of Wang, that *all* the electrodes 1, 2, and 3 must have the same polarity, since the power supplies 11, 12, and 13 all share a common terminal connected to the wafer 31. Thus, Wang does not disclose a processing head having anodes and cathodes, arranged alternately along at least one direction, so as to face the substrate when held by the substrate holder.

Boyd discloses a method and apparatus for cleaning a substrate using a fluid and acoustic energy; this is an electroless process, and there is no disclosure of a processing head having anodes and cathodes, arranged alternately along at least one direction, so as to face the substrate when held by the substrate holder. Boyd was also not relied on as disclosing such a processing head in the Action.

Talieh discloses an electrochemical mechanical deposition apparatus (see figure 1B)

having a single anode plate 30 (page 4, lines 28-31) and a single cathode (page 4, lines 19-22). In operation, a power source supplies a negative potential to the cathode and a positive potential to the anode (page 5, lines 13 and 14). The other embodiments in Talieh have a similar arrangement of a single anode and a single cathode. Thus Talieh does not disclose a processing head having anodes and cathodes, arranged alternately along at least one direction, so as to face the substrate when held by the substrate holder. Talieh was also not relied on as disclosing such a processing head in the Action.

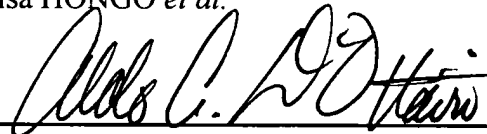
Thus, there is no suggestion of a processing head as recited in claim 34 in the combined disclosures of Wang, Boyd, and Talieh. Accordingly, it is submitted that claim 34 is allowable over the prior art of record, as are claims 38, 40, 41, and 54-56 depending therefrom.

In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is clearly in condition for allowance. An early notice thereof is earnestly solicited.

If, after reviewing this Amendment, the Examiner feels that there are any issues remaining which must be resolved before the application can be passed to issue, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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